

repeatedly sending the sequence of codewords as an answer tone signal from an answering modem to an originating modem, as part of a training sequence to initiate communication between the answering modem and the originating modem.

57. (New) A method comprising:

generating a sequence of expected sample values by applying an algorithm comprising

$$X_k = \text{Round}\{scl \times \sqrt{2} \times \cos(2\pi k \times 79/301 + 0.25 \times \pi/301) + 0.5\}, \text{ wherein } k = 0, 1, 2, \dots, 300, \text{ and}$$

wherein  $scl$  is a scaling value;

receiving at an originating modem a sequence of incoming codewords that represent an answer tone signal transmitted from an answering modem;

decoding the incoming codewords of the sequence so as to produce a sequence of incoming sample values; and

determining whether the incoming sample values are close enough to the expected sample values that a training sequence between the originating modem and the answering modem could be shortened.

58. (New) A method comprising:

generating a sequence of expected sample values by applying an algorithm comprising

$$X_k = \text{Round}\{scl \times \sqrt{2} \times \cos(2\pi k \times 79/301 + 0.25 \times \pi/301) + 0.5\}, \text{ wherein } k = 0, 1, 2, \dots, 300, \text{ and}$$

wherein  $scl$  is a scaling value;

encoding the expected sample values to produce expected codewords;

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receiving at an originating modem a sequence of incoming codewords that represent an answer tone signal transmitted from an answering modem; and

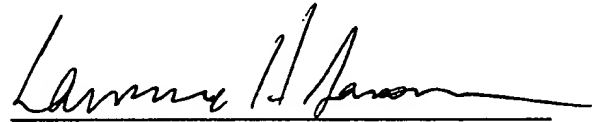
determining whether the incoming codewords are close enough to the expected codewords that a training sequence between the originating modem and answering modem could be shortened.

Respectfully submitted,

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